

**AMENDMENTS TO THE CLAIMS:**

Please amend the claims as follows, substituting any amended claim(s) for the corresponding pending claim(s):

1. (Currently Amended) A method of providing electrostatic discharge protection for an integrated circuit, comprising:  
    mounting an integrated circuit die on a lead frame including one or more leads or pins;  
    encapsulating at least part of the integrated circuit die and a portion of the lead frame with a plastic or epoxy material; and  
    folding an unencapsulated portion of the lead frame other than the leads or pins around sides of the encapsulated integrated circuit die and over or adjacent to a peripheral upper surface of the plastic or epoxy material.

2. (Original) The method of claim 1, further comprising:  
    connecting the portion of the lead frame folded around the sides of the encapsulated integrated circuit die and over or adjacent to the peripheral upper surface of the plastic or epoxy material to a ground voltage.

1 3. (Currently Amended) The method of claim 1, wherein the step of encapsulating at least part of  
2 the integrated circuit die with a plastic or epoxy material further comprising:

3 after mounting the integrated circuit die on the lead frame, encapsulating exposed surfaces  
4 of the integrated circuit die except for a sensing surface; and

5 encapsulating wire bonds connecting the integrated circuit die to portions of the lead frame  
6 connected to the leads.

1 4. (Currently Amended) The method of claim 1, wherein the step of folding a portion of the lead  
2 frame other than the leads or pins around sides of the encapsulated integrated circuit die and over  
3 or adjacent to a peripheral upper surface of the plastic or epoxy material further  
4 comprisingcomprises:

5 folding portions of the lead frame other than the leads or pins around each side of the  
6 encapsulated integrated circuit die.

1 5. (Currently Amended) The method of claim 1, wherein the step of folding a portion of the lead  
2 frame other than the leads or pins around sides of the encapsulated integrated circuit die and over  
3 or adjacent to a peripheral upper surface of the plastic or epoxy material further  
4 ~~comprising~~comprises:

5 folding a first portion of the lead frame other than the leads or pins around a first side of the  
6 encapsulated integrated circuit die, wherein the first portion includes an opening providing access  
7 for a connector to pins electrically connected to the integrated circuit die.

1 6. (Currently Amended) The method of claim 1, wherein the step of folding a portion of the lead  
2 frame other than the leads or pins around sides of the encapsulated integrated circuit die and over  
3 or adjacent to a peripheral upper surface of the plastic or epoxy material further  
4 ~~comprising~~comprises:

5 folding portions of the lead frame other than the leads or pins only around edges of the  
6 encapsulated integrated circuit die not including leads electrically connected to the integrated circuit  
7 die.

1 7. (Currently Amended) The method of claim 1, wherein the step of folding a portion of the lead  
2 frame other than the leads or pins around sides of the encapsulated integrated circuit die and over  
3 or adjacent to a peripheral upper surface of the plastic or epoxy material further  
4 ~~comprising~~comprises:

5 folding a first portion of the lead frame other than the leads or pins around a side of the  
6 encapsulated integrated circuit die; and

7 folding a second portion of the lead frame extending from the first portion over a peripheral  
8 upper surface of the encapsulated integrated circuit die.

1 8. (Currently Amended) The method of claim 1, wherein the step of folding a portion of the lead  
2 frame other than the leads or pins around sides of the encapsulated integrated circuit die and over  
3 or adjacent to a peripheral upper surface of the plastic or epoxy material further ~~comprising~~  
4 comprises:

5 folding a first portion of the lead frame other than the leads or pins around a side of the  
6 encapsulated integrated circuit die; and

7 folding a second portion of the lead frame extending from the first portion adjacent to and  
8 level with a peripheral upper surface of the encapsulated integrated circuit die.

1 21. (Previously Added) A method of providing electrostatic discharge protection for an integrated  
2 circuit, comprising:

3       encapsulating at least part of an integrated circuit die mounted on a lead frame and a portion  
4 of the lead frame with a plastic or epoxy material, leaving lead portions and an electrostatic discharge  
5 protection portion of the lead frame unencapsulated; and

6       folding the electrostatic discharge protection portion of the lead frame around the  
7 encapsulated integrated circuit die and over or adjacent to a surface of the plastic or epoxy material.

1 22. (Previously Added) The method of claim 21, wherein the step of encapsulating at least part of  
2 an integrated circuit die mounted on a lead frame and a portion of the lead frame with a plastic or  
3 epoxy material, leaving lead portions and an electrostatic discharge protection portion of the lead  
4 frame unencapsulated further comprises:

5       forming the plastic or epoxy material over one surface and sidewalls of the integrated circuit  
6 die and over portions of a surface of the lead frame on which the integrated circuit die is mounted,  
7 leaving an opposite surface of the lead frame and the lead portions and the electrostatic discharge  
8 protection portion of the lead frame unencapsulated.

1 23. (Previously Added) The method of claim 21, wherein the step of encapsulating at least part of  
2 an integrated circuit die mounted on a lead frame and a portion of the lead frame with a plastic or  
3 epoxy material, leaving lead portions and an electrostatic discharge protection portion of the lead  
4 frame unencapsulated further comprises:

5 leaving a contact surface of the integrated circuit die exposed.

1 24. (Previously Added) The method of claim 21, further comprising:

2 mounting the integrated circuit die on a flat lead frame having the lead portions projecting  
3 from at least one edge and the electrostatic discharge protection portion projecting from at least one  
4 edge.

1 25. (Previously Added) The method of claim 24, wherein the electrostatic discharge protection  
2 portion of the lead frame projects from an edge other than an edge from which the lead portions  
3 project.

1 26. (Previously Added) The method of claim 24, wherein the electrostatic discharge protection  
2 portion of the lead frame projects from an edge from which the lead portions project, the electrostatic  
3 discharge protection portion extending around the lead portions and beyond ends of the lead  
4 portions.

1 27. (Previously Added) The method of claim 24, wherein the electrostatic discharge protection  
2 portion of the lead frame projects from at least two opposing edges of the lead frame.

1 28. (Previously Added) The method of claim 28, wherein the electrostatic discharge protection  
2 portion of the lead frame projects from at least three edges of the lead frame, including one edge  
3 from which the lead portions project.

1 29. (Previously Added) A method of providing electrostatic discharge protection for an integrated  
2 circuit, comprising:

3 forming a flat lead frame having lead portions and an electrostatic discharge protection  
4 portion extending from edges thereof;

5 mounting an integrated circuit die on a surface of the lead frame and encapsulating the at  
6 least sides of the integrated circuit die and a portion of the lead frame surface on which the integrated  
7 circuit die is mounted with an encapsulating material, leaving the lead portions and the electrostatic  
8 discharge protection portion of the lead frame projecting beyond the encapsulating material;

9 folding the electrostatic discharge protection portion of the lead frame around one or more  
10 sides of the encapsulating material.

1 30. (Previously Added) The method of claim 29, wherein the step of folding the electrostatic  
2 discharge protection portion of the lead frame around one or more sides of the encapsulating material  
3 further comprises:

4 folding the electrostatic discharge protection portion of the lead frame to extend along the  
5 sides of the encapsulating material; and

6 folding the electrostatic discharge protection portion of the lead frame to extend over a  
7 periphery of a surface of the encapsulating material opposite the lead frame.



1 31. (Previously Added) The method of claim 29, wherein the step of folding the electrostatic  
2 discharge protection portion of the lead frame around one or more sides of the encapsulating material  
3 further comprises:

4 folding the electrostatic discharge protection portion of the lead frame to extend along the  
5 sides of the encapsulating material; and

6 folding the electrostatic discharge protection portion of the lead frame to extend adjacent to  
7 a surface of the encapsulating material opposite the lead frame.

1 32. (Previously Added) The method of claim 29, wherein the step of folding the electrostatic  
2 discharge protection portion of the lead frame around one or more sides of the encapsulating material  
3 further comprises:

4 folding the electrostatic discharge protection portion of the lead frame around at least two  
5 opposing sides of the encapsulating material.